

IN THE CLAIMS

1. (Currently Amended) A method comprising:
checking a current clock period when a memory is accessed, the current clock period being one of a given number of clock periods; ~~and~~
setting a usage bit corresponding to the current clock period during a writeback cycle to write data read from the memory back to the memory, the usage bit indicating usage information for the data,
resetting usage bits in response to changing an address or tag for the memory;
and
setting a usage bit corresponding to a current clock period,
wherein the memory is non-volatile destructive read cache memory.
2. (Previously Presented) The method of claim 1, comprising:
erasing usage bits corresponding to a new clock period.
3. (Previously Presented) The method of claim 2, wherein erasing includes erasing usage bits at once.
- 4-5. (Canceled)
6. (Previously Presented) The method of claim 1, wherein the given number of clock periods is four.
- 7-8. (Canceled)
9. (Previously Presented) The method of claim 1, wherein the memory is one of a polymer ferroelectric RAM, a magnetic RAM or a core memory.
10. (Canceled)

11. (Previously Presented) The method of claim 1, comprising:
de-allocating data in the memory based upon usage bits.

12-22. (Canceled)

23. (Currently Amended) A method comprising:
storing usage bits to indicate usage information for entries in a memory, a usage bit to indicate whether a corresponding entry was accessed during a corresponding one of a predetermined number of clock periods; ~~and~~
updating a usage bit for an entry read from the memory during a writeback cycle to write the read entry back to the memory by checking a current clock period when the memory is accessed, the current clock period being one of a predetermined number of clock periods, and setting a usage bit corresponding to the current clock period;
resetting usage bits when an address or tag for an entry is changed; and
setting a usage bit corresponding to a current clock period,
wherein the memory is non-volatile destructive read cache memory.

24. (Original) The method of claim 23, wherein the usage information is a least recently used information.

25-26. (Canceled)

27. (Currently Amended) The method of claim ~~[[26]]~~ 23, comprising:
erasing usage bits corresponding to a new clock period.

28-29. (Canceled)

30. (Currently Amended) The method of claim ~~[[26]]~~ 23, wherein the predetermined number of clock periods is four.

31. (Canceled)

32. (Currently Amended) A machine readable medium having executable instructions comprising:

a first group of executable instructions to check a current clock period when a memory is accessed, the current clock period being one of a predetermined number of clock periods; ~~and~~

a second group of executable instructions to set a usage bit corresponding to the current clock period during a writeback cycle to write data read from the memory back to the memory, the usage bit indicating usage information for the data; and

a third group of executable instructions to reset usage bits in response to changing an address or tag for the memory, and to set a usage bit corresponding to a current clock period,

wherein the memory is non-volatile destructive read cache memory.

33. (Previously Presented) The medium of claim 32, comprising:

a third group of executable instructions to erase usage bits corresponding to a new clock period.

34-59. (Canceled)

60. (Previously Presented) The method of claim 23, wherein the memory comprises polymer ferroelectric memory, magnetic random access memory (MRAM), or core memory.

61. (Previously Presented) The medium of claim 32, wherein the memory comprises polymer ferroelectric memory, magnetic random access memory (MRAM), or core memory.

62-67. (Canceled)